

JONES (W^m S.)

prolapse of the laryngeal
ventricle. —————



JONES (W. S.)

[Reprinted from THE MEDICAL NEWS, February 2, 1895.]

PROLAPSE OF THE LARYNGEAL VENTRICLE.¹

BY WILLIAM S. JONES, M.D.,

OF CAMDEN, N. J.:

CHIEF OF LARYNGOLOGICAL DEPARTMENT OF THE JEFFERSON
MEDICAL COLLEGE HOSPITAL.

THE orifices of the ventricle of the larynx are situated between the ventricular bands and the vocal bands, and extend nearly the whole length of the latter. The sac of the ventricle extends upward between the ventricular band and the thyroid cartilage. Its depth varies greatly in different persons. The position of the ventricle is such that there is only a very little strain upon it, even in violent coughing, and probably a person, to have a prolapse from any cause, would have to be in a weakened or neurotic condition producing a relaxation of the muscles and mucous membrane of the larynx.

Mr. R. S., aged thirty-five years, consulted me regarding an impairment of his voice, of four months' duration. On inquiry I found that his family history was not very good, one brother having died of lung-trouble, the family generally being neurotic and the patient particularly so. No other constitutional or acquired disease was manifest. As to the cause of his dysphonia, I found that while attending a game of ball, at a critical point in the game, his favorites gaining an advantage, he arose from his seat in an excited condition and shouted at the very top of his voice. In a few minutes this yell was

¹ Read before the Camden District Medical Society, November 13, 1894.



repeated. At once he noticed a slight impairment of his voice. This was due to a congestion of the vocal bands, for in a few minutes his voice was in a normal condition. In about two weeks from this time he again noticed a slight hoarseness, and as time advanced his dysphonia gradually increased. On examining the larynx I found a large mass, light red in color, situated just above the vocal band of the left side and resting on it. At the posterior and inferior portion of this mass there was noticed a very tenacious piece of mucus, held in position by the pressure of this mass on the band. This was removed. Never having seen an obstruction of this kind, I was in great doubt as to the diagnosis. The only symptom was dysphonia. Here was a large mass unilateral in location, and without surrounding inflammation or infiltration, and free from ulceration. So the idea of it being syphilitic or tuberculous was discarded. The color and smooth surface excluded angioma and papilloma. The broad base was against the theory of myxoma. Its position, shape, and color did not point to malignancy. It was only after several examinations that I concluded that this could only be a prolapse of the laryngeal ventricle.

In looking up the literature on this subject (of which there is nothing definite), among the few cases I find one reported by Prof. J. Solis-Cohen, and in consultation he confirmed the diagnosis.

Now, why was the dysphonia so long in following the cause, if the cause was his hallooing at the game of ball? The ventricle is held in position by the thyroarytenoid muscle assisted by the attachment of the connective tissue. If its connection with this muscle was severed during a violent strain, the only remaining support would be the attachment of the connective tissue, which would gradually give way with a continued use of the voice until there was a complete prolapse. This would account for the impairment of the voice occurring

some time after the cause, also for the increasing dysphonia.

Knowing the cause of this trouble, what is the best treatment? If the ventricle would remain in its normal position, replacement would be the proper procedure. But the condition of its former attachments would be such after four months of displacement that, if reduced, there would be no support to keep it in its normal position. In fact, I have replaced this mass a great many times, only to find that it would return as soon as pressure was removed. The only thing that will restore the voice seems, therefore, to be the removal of the obstruction. This can be done in several ways. The quickest would be by thyrotomy. This the patient objects to. Continued applications of caustics would remove it. The snare might be used in some cases. The cutting laryngeal forceps would also answer.

The treatment I adopted was the electric cautery. I used an electrode made especially for this case, with a shield on the left side to protect the ventricular band. This electrode was placed on the mass at a dark-red heat, and was held there by a slight pressure usually until the patient gagged. This was repeated several times at each visit, under the use of cocain. At first a 10 per cent. solution was used; but this did not have the desired effect, so a 20 per cent. solution was used, which gave the patient perfect control of the larynx. The man's voice now is almost normal. His aphonia has gradually disappeared, and only when he sings is there a slight impairment of the voice.

